

Add the following new claims:

36. The human fertility hormone of claim 1, said expression vector being autonomously replicating.

37. The cell of claim 5, said first expression vector being autonomously replicating.

38. The cell of claim 7, said second expression vector being autonomously replicating.

39. The cell of claim 16 wherein each said expression vector is autonomously replicating.

40. The expression vector of claim 22 or 23, said expression vector being autonomously replicating.

41. The method of claim 33, wherein each said expression vector is autonomously replicating.

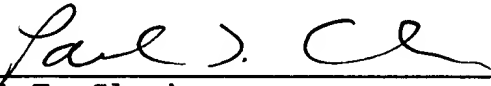
REMARKS

The specification and claims have been amended to recite the ATCC Accession numbers of deposited microorganisms, cells, and expression vectors. Alpha SVHVP1 and beta SVVP1 have the same number, 2075, because a mixture of the two viruses was deposited. pRF398 in C127 cells and pRF375 in C127 cells have the same number, CRL 8401, for the same reason. Attached hereto are the ATCC forms showing deposit according to the terms of the Budapest Treaty as of the filing date of the above-captioned application.

Claims 1, 5, 7, 16, 22, 23, and 34 have been amended to delete the limitation "autonomously replicating". New dependent claims 36-41 recite that limitation.

Early favorable action is requested.

Respectfully submitted,



Paul T. Clark
Attorney for Applicants
Fish & Richardson
28 State Street
Boston, MA 02109
(617) 523-7340

Date: 7-24-84



AMERICAN TYPE CULTURE COLLECTION

12301 Parklawn Drive, Rockville, Maryland 20852, U.S.A.

BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

VIABILITY STATEMENT ISSUED PURSUANT TO RULE 10.2

TO: Integrated Genetics, Inc.
ADDRESS: 51 New York Avenue
Framingham, Massachusetts 01701
Attention: Nancy Hsiung

DEPOSITOR: _____
ADDRESS: _____

Identification of the Microorganism(s)

Transformed mouse fibroblast cell, CMαβlh

ATCC Accession Designation(s)

CRL 8401

Date of the Deposit or of the Transfer* November 1, 1983

The viability of the microorganism(s) identified above was tested on November 14, 1983.
On that date, the said microorganism(s) was(were):

xx viable

 no longer viable

CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED (complete only if
test was negative): _____

INTERNATIONAL DEPOSITORY AUTHORITY:

Signature of person having the power to
represent the ATCC:

American Type Culture Collection
12301 Parklawn Drive
Rockville, Maryland 20852, U.S.A.

Bobbie A. Brandon
(Mrs.) Bobbie A. Brandon, Head
Professional Services Department

Date: November 22, 1983

*In cases referred to in Rule 10.2(a)(ii) and (iii), refer to the most recent viability
test.

cc: Paul Clark, Esq.
Fish and Richardson
28 State Street
Boston, Massachusetts 02109

Form BP/9 (one page only)



AMERICAN TYPE CULTURE COLLECTION

12301 Parklawn Drive, Rockville, Maryland 20852, U.S.A.

BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

VIABILITY STATEMENT ISSUED PURSUANT TO RULE 10.2

TO: Integrated Genetics, Inc.
ADDRESS: 51 New York Avenue
Framingham, Massachusetts 01701
Attention: Nancy Hsiung

DEPOSITOR: _____
ADDRESS: _____

Identification of the Microorganism(s)

Transformed mouse fibroblast cell, CSM α 86C

ATCC Accession Designation(s)

CRL 8400

Date of the Deposit or of the Transfer* November 1, 1983

The viability of the microorganism(s) identified above was tested on November 21, 1983.
On that date, the said microorganism(s) was(were):

XX viable

_____ no longer viable

CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED (complete only if test was negative):

INTERNATIONAL DEPOSITORY AUTHORITY:

American Type Culture Collection
12301 Parklawn Drive
Rockville, Maryland 20852, U.S.A.

Signature of person having the power to represent the ATCC:

Bobbie A. Brandon

(Mrs.) Bobbie A. Brandon, Head
Professional Services Department

Date: November 22, 1983

*In cases referred to in Rule 10.2(a)(ii) and (iii), refer to the most recent viability test.

cc: ☒ Paul Clark, Esq.
Fish and Richardson
28 State Street
Boston, Massachusetts 02109

Form BP/9 (one page only)



AMERICAN TYPE CULTURE COLLECTION
12301 Parklawn Drive, Rockville, Maryland 20852, U.S.A.

BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

TO: Integrated Genetics, Inc.
51 New York Avenue
Framingham, Massachusetts 01701
Attention: Vemuri B. Reddy

RECEIPT IN THE CASE OF AN
ORIGINAL DEPOSIT issued
pursuant to Rule 7.3 by the
INTERNATIONAL DEPOSITARY AUTHORITY

*Name and Address of Depositor
or His/Her Attorney*

Identification reference given by the
DEPOSITOR:

Accession number given by the ATCC:

Escherichia coli RF322 containing plasmid pCL28XhoLHBPV

RECEIVED
PAUL T. CLARK
BY

The microorganism(s) identified above was(were) accompanied by:

 a scientific description

NOV 14 1983

xx a proposed taxonomic designation: Escherichia coli

The microorganism(s) identified above was(were) received on November 2, 1983
by this International Depositary Authority and has been accepted.

Name of International Depositary Authority

American Type Culture Collection

Address: 12301 Parklawn Drive

Rockville, Md. 20852 U.S.A.

cc: ☒ Paul T. Clark, Esq.
Fish and Richardson
28 State Street
Boston, Massachusetts 02109

Signature of person having the power
to represent the American Type
Culture Collection.

Bobbie A. Brandon
(Mrs.) Bobbie A. Brandon

Date: November 7, 1983



AMERICAN TYPE CULTURE COLLECTION
12301 Parklawn Drive, Rockville, Maryland 20852, U.S.A.

BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

rec'd
Dec. 5 1983
by [signature] Mjm

TO: Integrated Genetics, Inc.
51 New York Avenue
Framingham, Massachusetts 01701
Attention: Vemuri B. Reddy

RECEIPT IN THE CASE OF AN
ORIGINAL DEPOSIT issued
pursuant to Rule 7.3 by the
INTERNATIONAL DEPOSITARY AUTHORITY

Name and Address of Depositor
or His/Her Attorney

Identification reference given by the
DEPOSITOR:

Virus α SVHVP1, β SVVP1
Virus α LHSVVP1
Virus α β SVVP1

Accession number given by the ATCC:

VR 2075
VR 2076
VR 2077

The microorganism(s) identified above was(were) accompanied by:

___ a scientific description

___ a proposed taxonomic designation: _____

The microorganism(s) identified above was(were) received on November 1, 1983
by this International Depositary Authority and has been accepted.

Name of International Depositary Authority

American Type Culture Collection

Address: 12301 Parklawn Drive

Rockville, Md. 20852 U.S.A.

cc: ☒ Paul Clark, Esq.
Fish and Richardson
28 State Street
Boston, Massachusetts 02109

Signature of person having the power
to represent the American Type
Culture Collection.

Bobbie A. Brandon
(Mrs.) Bobbie A. Brandon

Date: November 29, 1983



AMERICAN TYPE CULTURE COLLECTION

12301 Parklawn Drive, Rockville, Maryland 20852, U.S.A.

BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

VIABILITY STATEMENT ISSUED PURSUANT TO RULE 10.2

TO: Integrated Genetics, Inc.
ADDRESS: 51 New York Avenue
Framingham, Massachusetts 01701
Attention: Vemuri B. Reddy

DEPOSITOR: _____
ADDRESS: _____

Identification of the Microorganism(s)

Virus α SVHVP1, β SVVP1

Virus α LHSVVP1

Virus α β SVVP1

ATCC Accession Designation(s)

VR 2075

VR 2076

VR 2077

Date of the Deposit or of the Transfer* November 1, 1983

The viability of the microorganism(s) identified above was tested on November 28, 1983.
On that date, the said microorganism(s) was(were):

XX viable

 no longer viable

CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED (complete only if
test was negative): _____

INTERNATIONAL DEPOSITORY AUTHORITY:

American Type Culture Collection
12301 Parklawn Drive
Rockville, Maryland 20852, U.S.A.

Signature of person having the power to
represent the ATCC:

Bobbie A. Brandon
(Mrs.) Bobbie A. Brandon, Head
Professional Services Department

Date: November 29, 1983

*In cases referred to in Rule 10.2(a)(ii) and (iii), refer to the most recent viability
test.

cc: ☒ Paul Clark, Esq.
Fish and Richardson
28 State Street
Boston, Massachusetts 02109

Form BP/9 (one page only)



AMERICAN TYPE CULTURE COLLECTION
12301 Parklawn Drive, Rockville, Maryland 20852, U.S.A.

BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

TO: Integrated Genetics, Inc.
51 New York Avenue
Framingham, Massachusetts 01701
Attention: Nancy Hsiung

RECEIPT IN THE CASE OF AN
ORIGINAL DEPOSIT issued
pursuant to Rule 7.3 by the
INTERNATIONAL DEPOSITARY AUTHORITY

*Name and Address of Depositor
or His/Her Attorney*

Identification reference given by the
DEPOSITOR:

Accession number given by the ATCC:

Transformed mouse fibroblast cell, CMH1a

CRL 8399

The microorganism(s) identified above was(were) accompanied by:

___ a scientific description

___ a proposed taxonomic designation: _____

The microorganism(s) identified above was(were) received on October 27, 1983
by this International Depositary Authority and has been accepted.

Name of International Depositary Authority

American Type Culture Collection

Address: 12301 Parklawn Drive

Rockville, Md. 20852 U.S.A.

Signature of person having the power
to represent the American Type
Culture Collection.

Robbie A. Brandon
(Mrs.) Robbie A. Brandon

Date: November 22, 1983

cc: ✓ Paul Clark, Esq.
Fish and Richardson
28 State Street
Boston, Massachusetts 02109



AMERICAN TYPE CULTURE COLLECTION
12301 Parklawn Drive, Rockville, Maryland 20852, U.S.A.

BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

TO: Integrated Genetics, Inc.
51 New York Avenue
Framingham, Massachusetts 01701
Attention: Nancy Hsiung

RECEIPT IN THE CASE OF AN
ORIGINAL DEPOSIT issued
pursuant to Rule 7.3 by the
INTERNATIONAL DEPOSITARY AUTHORITY

*Name and Address of Depositor
or His/Her Attorney*

Identification reference given by the
DEPOSITOR:

Accession number given by the ATCC:

Transformed mouse fibroblast cell, CSM α 6C
Transformed mouse fibroblast cell, CSM α 1h

CRL 8400
CRL 8401

The microorganism(s) identified above was(were) accompanied by:

___ a scientific description

___ a proposed taxonomic designation: _____

The microorganism(s) identified above was(were) received on November 1, 1983
by this International Depositary Authority and has been accepted.

Name of International Depositary Authority

American Type Culture Collection

Address: 12301 Parklawn Drive

Rockville, Md. 20852 U.S.A.

Signature of person having the power
to represent the American Type
Culture Collection.

Robbie A. Brandon
(Mrs.) Robbie A. Brandon

Date: November 22, 1983

cc: ☒ Paul Clark, Esq.
Fish and Richardson
28 State Street
Boston, Massachusetts 02109



AMERICAN TYPE CULTURE COLLECTION

12301 Parklawn Drive, Rockville, Maryland 20852, U.S.A.

BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

VIABILITY STATEMENT ISSUED PURSUANT TO RULE 10.2

TO: Integrated Genetics, Inc.
ADDRESS: 51 New York Avenue
Framingham, Massachusetts 01701
Attention: Nancy Hsiung

DEPOSITOR: _____
ADDRESS: _____

Identification of the Microorganism(s)

ATCC Accession Designation(s)

Transformed mouse fibroblast cell, CMHla

CRL 8399

Date of the Deposit or of the Transfer* October 27, 1983

The viability of the microorganism(s) identified above was tested on November 21, 1983.
On that date, the said microorganism(s) was(were):

XX viable

 no longer viable

CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED (complete only if
test was negative): _____

INTERNATIONAL DEPOSITORY AUTHORITY:

American Type Culture Collection
12301 Parklawn Drive
Rockville, Maryland 20852, U.S.A.

Signature of person having the power to
represent the ATCC:

Bobbie A. Brandon
(Mrs.) Bobbie A. Brandon, Head
Professional Services Department

Date: November 22, 1983

*In cases referred to in Rule 10.2(a)(ii) and (iii), refer to the most recent viability
test.

cc: Paul Clark, Esq.
Fish and Richardson
28 State Street
Boston, Massachusetts 02109

Form BP/9 (one page only)



AMERICAN TYPE CULTURE COLLECTION

12301 Parklawn Drive, Rockville, Maryland 20852, U.S.A.

BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

VIABILITY STATEMENT ISSUED PURSUANT TO RULE 10.2

TO: Integrated Genetics, Inc.
ADDRESS: 51 New York Avenue
Framingham, Massachusetts 01701
Attention: Vemuri B. Reddy

DEPOSITOR: _____
ADDRESS: _____

Identification of the Microorganism(s)

ATCC Accession Designation(s)

Escherichia coli RF322 containing plasmid pCL28XhoLHBPV

39475

Date of the Deposit or of the Transfer* _____

November 2, 1983

The viability of the microorganism(s) identified above was tested on November 4, 1983.
On that date, the said microorganism(s) was(were):

xx viable

 no longer viable

CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED (complete only if
test was negative): _____

INTERNATIONAL DEPOSITORY AUTHORITY:

Signature of person having the power to
represent the ATCC:

American Type Culture Collection
12301 Parklawn Drive
Rockville, Maryland 20852, U.S.A.

Bobbie A. Brandon
(Mrs.) Bobbie A. Brandon, Head
Professional Services Department

Date: November 7, 1983

*In cases referred to in Rule 10.2(a)(ii) and (iii), refer to the most recent viability
test. cc: ✓ Paul T. Clark, Esq.

Fish and Richardson

Form BP/9 (one page only) 28 State Street, Boston, MA 02109